



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,168	06/19/2003	Scott Andrew Tillotson	902.0118.U1(US)	9774
29683	7590	10/24/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			AZARIAN, SEYED H	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/600,168		TILLOTSON, SCOTT ANDREW	
	<b>Examiner</b>		<b>Art Unit</b>	
	Seyed Azarian		2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                  |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                      | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                             | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/19/03</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-20 and 23-24, are rejected under 35 U.S.C. 102(e) as being anticipated by Hind et al (U.S. patent 6,948,066).

Regarding claim 1, Hind discloses a digital watermarking system, comprising: a mobile device comprising an image capture sub-system for generating digital data representing an image from one or more desired vantage points (column 8, lines 47-51, the security of wireless pervasive devices. Central to the invention is a comprehensive, top-down design that focuses first and foremost on security through a security core (mobile device), which comprises a central processing unit CPU and protected area for storing cryptographic keys. Also column 9, lines 58-66, refers to display, biometric sensor, video camera and GPS);

input information comprising at least one piece of evanescent information (column 17, lines 1-35, refer to input information);

a data processor for processing the digital data, where the data processor derives digital watermarking data from a digital watermarking algorithm and input information and the processor incorporates the digital watermarking data into the digital data to produce a digitally

Art Unit: 2624

watermarked image (column 14, lines 19-25, the security core will initialize a set of hash values and other hash algorithms).

Regarding claim 2, Hind discloses a system as in claim 1, further comprising a wireless link for transmitting from the device to a remote data processor at least one of the digital data, the input information and the digitally watermarked image (column 9, lines 45-55, also column 13, line 51 through column 14, line 4, refer to location).

Regarding claim 3, Hind discloses a system as in claim 2, where the digital data is received through the wireless link from a data communications network for storage within the mobile device (column 9, lines 35-55, also column 24, lines 1-13, storage media).

Regarding claim 4, Hind discloses a system as in claim 3, where the data communications network comprises the Internet (column 11, lines 38-41, web browser).

Regarding claim 5, Hind discloses a system as in claim 2, where the wireless link comprises an interface to a remote data processor that is reachable through the Internet (see claims 3 and 4, also column 14, lines 49-66, internet location).

Regarding claim 6, Hind discloses a system as in claim 5, where the data processor that processes the digital data comprises the remote data processor (see above claims and column 9, lines 35-58).

Regarding claim 7, Hind discloses a system as in claim 1, wherein the evanescent information comprises at least one of location information, biometric information, meteorological information, temporal information, custodial information, financial information, criminal information, civil information, physical attribute information, and travel information

Art Unit: 2624

(column 9, lines 59-67, biometric information, column 13, lines 51, through column 14, line 3, refer to network and biometric pressure).

Regarding claim 8, Hind discloses a system as in claim 7, wherein the travel information comprises at least one of point of origin, destination, citizenship and identity of traveling companions (column 18, lines 5-41, user's identity).

Regarding claim 9, Hind discloses a system as in claim 7, wherein the biometric information comprises at least one of hand geometry data, facial recognition data, retinal scan data, iris scan data, fingerprint data, and voice data (column 17, lines 1-8, refer to biometric).

Regarding claim 10, Hind discloses a system as in claim 7, wherein the location information comprises at least one of geographic coordinates, a relative bearing, a relative distance and an elevation (column 19, line 63 through column 20, line 11, time/date, location (GPS), direction).

Regarding claim 12, Hind discloses a mobile imaging device for creating a digital image of a subject, the device comprising a location determination system and a processor for digital watermarking the digital image with at least location information received from the location determination system (see claim 1, also column 16, lines 6-12, digital watermarking).

Regarding claim 13, Hind discloses an imaging system as in claim 12, wherein the location information comprises at least one of longitude, latitude, elevation, relative bearing, and relative distance (column 19, line 63 through column 20, line 11, time/date, location (GPS), direction).

Regarding claim 16, Hind discloses an imaging system as in claim 15, wherein the biometric data comprises at least one of hand geometry data, facial recognition data, retinal scan

Art Unit: 2624

data, iris scan data, fingerprint data, and voice data (see claim 1, also column 9, lines 59-67, biometric information, column 13, lines 51, through column 14, line 3, refer to network and biometric pressure).

Regarding claim 17, Hind discloses an imaging system as in claim 15, wherein the biometric data comprises at least one of height, weight and hair color (column 18, lines 4-21, body weight).

Regarding claim 19, Hind discloses a method as in claim 18, wherein the processing is completed by a remote data processor (column 9, lines 45-55, also column 13, line 51 through column 14, line 4, refer to location).

Regarding claim 23, Hind discloses a method as in claim 18, wherein processing the digital data comprises using a digital signature hash function (column 6, lines 10-20, hash function).

With regard to claims 11, 14, 15, 18, 20 and 24 the arguments analogous to those presented above for claims 1, 7, 9 and 10, are respectively applicable to claims 11, 14, 15, 18, 20 and 24.

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2624

4. Claims 21-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al (U.S. patent 6,948,066) in view of Hoffberg et al (U.S. patent 6,400,996).

However regarding claim 21, Hind does not explicitly disclose its corresponding “Digital data comprises using a discrete cosine transform”. On the other hand Hoffberg in the same field of monitoring systems teaches (column 104, lines 2-24, the method emphasizes structural aspects of the image, as opposed to frequency decomposition used in DCT method).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hind invention according to the teaching of Hoffberg because it provides improvement and accuracy of image compression, which can easily be implemented in an images device such as video camera.

Regarding claim 22, Hind discloses a method as in claim 18, wherein processing the digital data comprises using a pixel modification process (see claim 1 and 21 also column 18, line 61 through column 19, line 19).

### Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(U.S. patent 7,024,016) to Rhoads et al is cited for digital watermarking apparatus and methods.

(U.S. patent 6,823,075) to Perry is cited for authentication watermarks for printed objects and related applications.

(U.S. patent 6,963,973) to Chapman et al is cited for chain of custody system and method.

(U.S. patent 7,097,106) to Silverbrook et al is cited for handheld laser scanner.

**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Seyed Azarian*  
Patent Examiner  
Group Art Unit 2624  
October 12, 2006

